

## APPENDIX I:

THE LISTING OF CLAIMS:

1. (previously presented) A catalyst obtained from
  - a) a chromium compound  $\text{CrX}_3$  and the at least equimolar amount, based on the chromium compound  $\text{CrX}_3$ , of a ligand L or from an existing chromium complex  $\text{CrX}_3\text{L}$ , in which the groups X are, independently of one another, abstractable counterions and L is a 1,3,5-triazacyclohexane of the formula I
 

where the groups  $\text{R}^1$  to  $\text{R}^9$  are, independently of one another: hydrogen or organosilicon or substituted or unsubstituted carboorganic groups having from 1 to 30 carbon atoms, where two geminal or vicinal radicals  $\text{R}^1$  to  $\text{R}^9$  may also be joined to form a five- or six-membered ring, and
  - b) at least one activating additive selected from the group consisting of (i) and (ii) wherein:
    - i) is a combination of
      - an unsubstituted or substituted five-membered aromatic N-heterocycle and
      - at least one aluminum alkyl, wherein some of the alkyl groups of the aluminum alkyl are optionally replaced by halogen and/or alkoxy, and
    - ii) is an alkylalumoxane.
2. (previously presented) The catalyst defined in claim 1, wherein the groups  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  in the 1,3,5-triazacyclohexane I are, independently of one another, substituted or unsubstituted  $\text{C}_1\text{-C}_{12}$ -alkyl,  $\text{C}_6\text{-C}_{15}$ -aryl or  $\text{C}_7\text{-C}_8$ -arylalkyl.
3. (previously presented) The catalyst defined in claim 1, wherein the groups  $\text{R}^1$ ,  $\text{R}^2$  and  $\text{R}^3$  in the 1,3,5-triazacyclohexane I are, independently of one another, substituted or unsubstituted  $\text{C}_1\text{-C}_{12}$ -alkyl or  $\text{C}_7\text{-C}_8$ -arylalkyl.
4. (canceled)

5. (original) [(1,3,5-Tris(2-n-propylheptyl)-1,3,5-triazacyclohexane) CrCl<sub>3</sub>].

6. (original) [(1,3,5-Tris(2-ethylhexyl)-1,3,5-triazacyclohexane) CrCl<sub>3</sub>].

7. (previously presented) A process for preparing oligomers having up to 30 carbon atoms by reaction of an olefin or a mixture of olefins at from 0 to 150°C and pressures of from 1 to 200 bar in the presence of the catalyst defined in claim 1.

8. (previously presented) The catalyst defined in claim 1, wherein the groups R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> in the 1,3,5-triazacyclohexane I are, independently of one another, hydrogen or methyl.

9. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is selected from straight-chain and branched  $\alpha$ -olefins having from 2 to 4 carbon atoms.

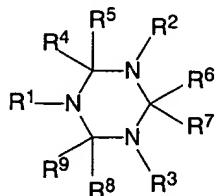
10. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is selected from 1-butene and 1-butene in mixture with its isomers.

11. (new) A process as claimed in claim 7, wherein the olefin or mixture of olefins is employed in form of a raffinate comprising 1-butene in mixture with its isomers.

12. (new) A process as claimed in claim 7, wherein the olefin is ethene.

13. (new) A process as claimed in claim 7, wherein the catalyst is obtained from

a) a chromium compound CrX<sub>3</sub> and the at least equimolar amount, based on the chromium compound CrX<sub>3</sub>, of a ligand L or from an existing chromium complex CrX<sub>3</sub>L, in which the groups X are, independently of one another, abstractable counterions and L is a 1,3,5-triazacyclohexane of the formula I



I

where the groups R<sup>1</sup> to R<sup>9</sup> are, independently of one another: hydrogen or organosilicon or substituted or unsubstituted

carboorganic groups having from 1 to 30 carbon atoms, where two geminal or vicinal radicals R<sup>1</sup> to R<sup>9</sup> may also be joined to form a five- or six-membered ring, and

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> in part or in whole, and independently of one another, are a group which carries a substituent attached via a carbon atom, in the  $\beta$  position relative to the nitrogen atom of the 1,3,5-triazacyclohexane ring, and

b) the alkylalumoxane.

14. (new) A process as claimed in claim 13, wherein the olefin is ethene.